1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 PRODUCT IDENTIFIER:
TRADE NAME: INTENSITY® POST-EMERGENCE GRASS HERBICIDE

1.2 RECOMMENDED USE:
FOR POST-EMERGENCE CONTROL OF GRASSES

1.3 SUPPLIER DETAILS:
LOVELAND PRODUCTS, INC.
P.O. Box 1286 • Greeley, CO 80632-1286

1.4 24 Hour Emergency Phone: 1-800-424-9300 - Medical Emergencies: 1-866-944-8565
U.S. Coast Guard National Response Center: 1-800-424-8802

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to 29 CFR 1910.1200

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Oral toxicity</td>
<td>Category 4</td>
<td>H302</td>
</tr>
<tr>
<td>Skin irritation</td>
<td>Category 2</td>
<td>H315</td>
</tr>
<tr>
<td>Skin/Dermal Sensitization</td>
<td>Category 1</td>
<td>H317</td>
</tr>
<tr>
<td>Eye Irritation</td>
<td>Category 2B</td>
<td>H320</td>
</tr>
<tr>
<td>Acute Inhalation Toxicity</td>
<td>Category 4</td>
<td>H332</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Category 2</td>
<td>H351</td>
</tr>
</tbody>
</table>

2.2 Label elements

Signal word: WARNING
Hazard Statement: H302 – Harmful if swallowed.
H315 – Causes skin irritation.
H317 – May cause an allergic skin reaction.
H320 – Causes eye irritation.
H332 – Harmful if inhaled
H351 – Suspected of causing cancer.

Precautionary Statement:
P262 – Do not get in eyes, on skin, or on clothing.
P264 - Wash hands thoroughly after handling.
P271 – Use only outdoors or in a well-ventilated area.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.
P102 – Keep out of reach of children.

Precautionary Statement:
P305+P351+P338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P101 – If medical advice is needed, have the product container or label at hand.
P363 – Wash contaminated clothing before reuse.
P391 – Collect spillage.

Precautionary Statement:
P402+P234 – Store in a dry place. Keep only in original container.
P405 – Store locked up.
2.3 Other hazards
None known

KEEP OUT OF REACH OF CHILDREN –
Appearance and odor: Amber liquid with mild aromatic odor.

Potential Health effects

Routes of exposure
Eye contact. Skin contact.

Eyes
Causes eye irritation.

Skin
Causes skin irritation.

Inhalation
Harmful if inhaled.

Ingestion
Harmful if swallowed.

Target organs
Eyes.

Signs and symptoms
Causes eye irritation.

Potential environmental effects
This product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have harmful or damaging effect on the environment.

3. COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

3.2 Mixtures

Classification according to 29 CFR 1910.1200

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Classification</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clethodim</td>
<td>99129-21-2</td>
<td>Oral tox 4; H302</td>
<td>26.40</td>
</tr>
<tr>
<td>*Other ingredients, including</td>
<td>n/a</td>
<td>Skin irrit. 2; H315</td>
<td>73.60</td>
</tr>
<tr>
<td>+contains xylene range aromatic solvent</td>
<td>64742-94-5</td>
<td>Skin/dermal sens. 1; H317</td>
<td></td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>Eye irrit. 2B; H320</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inh. tox. 4; H332</td>
<td></td>
</tr>
</tbody>
</table>

*Ingredients not specifically listed are non-hazardous and are to be considered proprietary or confidential business information per 29 CFR 1910.1200(i)

4. FIRST AID MEASURES

4.1 Description of First Aid Measures
General Advice: Get medical attention if symptoms occur.

If in eyes:
Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If on skin or clothing:
Take of contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

If swallowed:
Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

If inhaled:
Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

4.2 Most Important Symptoms and Effects, Acute and Delayed

Symptoms:
Eyes: Causes eye irritation.
Skin: Causes skin irritation.

4.3 Immediate Medical Attention and Special Treatment

Treatment:
Treat symptomatically. Symptoms may be delayed.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565
Take container, label or product name with you when seeking medical attention.

NOTES TO PHYSICIAN:
Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.
5. FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

Suitable Extinguishing Media: Dry chemical, carbon dioxide (CO₂), alcohol foam, foam, water spray or fog. Do not use water jet as this will spread the fire.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Specific Hazards During Firefighting: During a fire, hazardous by-products can be released.

5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

Special Protective Equipment for Firefighters: Self-contained breathing apparatus and full protective gear should be worn in fighting large fires involving chemicals. Use water spray to keep fire exposed containers cool. Keep people away. Isolate fire and deny unnecessary entry.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions: Avoid inhalation of vapors and spray mist and contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing.

6.2 ENVIRONMENTAL PRECAUTIONS

Environmental Precautions: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

Methods for Clean-Up:

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. After removal flush contaminated area thoroughly with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to Remove residual contamination.

Never return spills to original containers for re-use.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe Handling: Avoid inhalation of mists, vapors / spray and contact with eyes, skin and clothing. Do not breathe mists or vapor. Wear personal protective equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. Wash thoroughly after handling. Do not empty into drains. Handle and open container with care. Use care in handling/storage. Wash before eating, drinking and/or smoking.

7.2 CONDITIONS FOR SAFE STORAGE:

Requirements for Storage Areas and Containers: Keep pesticide in original container. Do not put concentrate or dilute into food or drink containers. Store in a cool, dry place. Do not store diluted spray. Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS:

OCCUPATIONAL EXPOSURE LIMITS

U.S. Workplace Exposure Level (ACGIH) TLVs

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>TLV</td>
<td>52 mg/m³</td>
</tr>
</tbody>
</table>

U.S. Workplace Exposure Level (OSHA) PELs

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>TLV</td>
<td>50 mg/m³</td>
</tr>
</tbody>
</table>

Biological limit values

<table>
<thead>
<tr>
<th>ACGIH Biological Exposure Indices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>No listings</td>
</tr>
</tbody>
</table>
8.2 EXPOSURE CONTROLS:

Engineering Measures
Provide adequate general and local exhaust ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors and spray mists. Provide eyewash station and safety shower.

Individual Protection Measures:
Eye / Face Protection: Goggles or shielded safety glasses are recommended.
Skin Protection: Long-sleeved shirt and long pants. Chemical-resistant gloves, such as polyethylene or polyvinylchloride. Shoes plus socks.
Respiratory Protection: In case of inadequate ventilation or risk of inhalation of mists or vapors, use suitable respiratory equipment such as MSHA/NIOSH approved respirators with NIOSH approved filter media. Wear respiratory protection during operations where spraying or misting occurs. If respirators are used, a program should be in place to assure compliance with 29 CFR 1810.134, the OSHA Respiratory Protection standard. Wear air supplied respiratory protection if exposure concentrations are unknown.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 APPEARANCE:
Liquid

ODOR: Mild aromatic.
ODOR THRESHOLD: No data available.
COLOR: Amber.
PH: 4 – 5 (1% solution)
MELTING POINT / FREEZING POINT: No data available
BOILING POINT: No data available
FLASH POINT: 142°F (61.1°C).
FLAMMABILITY (solid, gas): No data available.
UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: No data available.
VAPOR PRESSURE: No data available.
SOLUBILITY: Emulsifies.
PARTITION CO-EFFICIENT, n-OCTANOL / WATER: No data available.
AUTO-IGNITION TEMPERATURE: No data available.
DECOMPOSITION TEMPERATURE: No data available.
VISCOSITY: (kinematic): No data available.
SPECIFIC GRAVITY (Water = 1): 0.96 g/ml
BULK DENSITY: 8.01 lbs./gal / 0.96 kg/L

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

10.1 REACTIVITY
Stable

10.2 CHEMICAL STABILITY
Stable under normal temperature conditions. Unstable at extreme pH’s, temperatures, and exposure to UV light.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS
No data available. Will not polymerize.

10.4 CONDITIONS TO AVOID
Excessive heat and sources of ignition.

10.5 INCOMPATIBLE MATERIALS
Strong oxidizers.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS
Oxides of carbon, oxides of nitrogen and sulfur may be formed in a fire situation.

11 TOXICOLOGICAL INFORMATION

11.3 LIKELY ROUTES OF EXPOSURE
Eye contact. Skin contact. Ingestion.
LC50 (rat): >2 mg/L (4 HR)
LD50 Oral (rat): > 2,000 mg/kg
LD50 Dermal (rabbit): > 5,000 mg/kg
Acute Toxicity Estimates: No data available
Skin Irritation (rabbit): Causes moderate skin irritation.
Eye Irritation (rabbit): Causes moderate eye irritation
Specific Target Organ Toxicity: Single exposure: No data available.
Aspiration: No data available
Skin Sensitization (guinea pig): Sensitizer
Carcinogenicity: Reasonable Anticipated To Be A Human Carcinogen (Naphthalene)
Germ Cell Mutagenicity: No data available
Interactive Effects: None known
12 ECOLOGICAL INFORMATION

12.3 ECOTOXICITY
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Ecotoxicological Data

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clethodim</td>
<td>Rainbow trout 56 mg/L – 96-hour LC50</td>
</tr>
<tr>
<td>Bluegill</td>
<td>&gt;100 mg/L – 96-hour LC50</td>
</tr>
<tr>
<td>Daphnia magna</td>
<td>&gt;100 mg/L – 48-hour EC50</td>
</tr>
<tr>
<td>Bee</td>
<td>&gt;100 μ/bee – Contact LD50</td>
</tr>
</tbody>
</table>

Drift or runoff may adversely affect non-target plants.
Do not apply directly to water.
Do not contaminate water when disposing of equipment wash water.
Do not apply when weather conditions favor drift from target area.

12.2 PERSISTENCE AND DEGRADABILITY
Biodegradability: No data available

12.3 BIOACCUMULATIVE POTENTIAL
Bioaccumulation: No data available.

12.4 MOBILITY IN SOIL
No data available.

12.5 OTHER ADVERSE EFFECTS
Assessment: No data available.

13 DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS
Wastes may be disposed of on site or at an approved waste disposal facility. Triple rinse (or equivalent), adding rinse water to spray tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by appropriate authorities. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at http://www.acrecycle.org/. Do not contaminate water, food or feed by storage or disposal.

14 TRANSPORT INFORMATION

14.3 LAND TRANSPORT
DOT Shipping Description: 119 GALLONS AND LESS: NOT REGULATED BY DOT
GREATER THAN 119 GALLONS: NA1993, COMBUSTIBLE LIQUID, N.O.S. (NAPHTHALENE), III, ERG GUIDE 128
U.S. Surface Freight Classification: COMPOUND, TREE OR WEED KILLING, NOI (NMFC 50320, SUB 2: CLASS: 60)

15 REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

NFPA & HMIS Hazard Ratings:

<table>
<thead>
<tr>
<th>NFPA</th>
<th>HMIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Health</td>
<td>2 Health</td>
</tr>
<tr>
<td>0 Flammability</td>
<td>0 Flammability</td>
</tr>
<tr>
<td>0 Instability</td>
<td>0 Reactivity</td>
</tr>
<tr>
<td>3 High</td>
<td>B PPE</td>
</tr>
<tr>
<td>4 Severe</td>
<td></td>
</tr>
</tbody>
</table>

SARA Hazard Notification/Reporting

<table>
<thead>
<tr>
<th>Immediate</th>
<th>Fire</th>
<th>Sudden Release of Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Delayed</th>
<th>Reactive</th>
<th>Sudden Release of Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>
Reportable Quantity (RQ) under U.S. CERCLA: Naphthalene (CAS: 91-20-3) 100 lbs.
SARA, Title III, Section 313: Naphthalene (CAS: 91-20-3) 5-7%; 1,2,4 Trimethylbenzene (CAS: 95-63-6) 2-3%
RCRA Waste Code: Naphthalene – U165
CA Proposition 65: WARNING: This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**WARNING**
Causes substantial but temporary eye irritation.
Avoid contact with skin.
Do not get in eyes, on skin, or on clothing.
Harmful if swallowed or inhaled.
Avoid breathing spray vapors or spray mist.
Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

### 16 OTHER INFORMATION

**SDS STATUS:** Format revised.
**PREPARED BY:** Registrations and Regulatory Affairs
**REVIEWED BY:** Environmental Health and Safety
**EPA REG. NO.:** 34704-864

@Intensity is a registered trademark of Loveland Products, Inc.

**Disclaimer and Limitation of Liability:** This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and LOVELAND PRODUCTS, INC. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.